

### **REMARKS/ARGUMENTS**

In the remarks concerning Elections/Restrictions presented on page 2 of the Office Action, the Examiner states that "claims 10, 11, 16, 26, and 35-57 are withdrawn from further consideration... as being drawn to a non-elected species". In fact, however, the withdrawn claims are 10, 11, 16, 20, 21 and 35-57.

Claims 1-9 and 12 have been rejected under 35 USC 112, second paragraph, as being indefinite. The Examiner points to two deficiencies in claim 1 and to one deficiency in claim 12. All these deficiencies have been addressed in a self-explanatory manner hereinabove. Therefore, this rejection is now moot.

Claims 1-7, 12-15 and 17-19 have been rejected under 35 USC 102(b) as anticipated by Adams et al., USP 6,123,502 ("Adams"). Reconsideration and withdrawal of this rejection are requested in light of the following remarks.

Claim 1 is directed to a semiconductor wafer holding system for holding wafers in position within a transfer chamber during transfer of the wafers between an ambient atmosphere and an inspection chamber which is at vacuum pressure. The transfer chamber is interposed between the ambient atmosphere and the inspection chamber, and is subjected to alternating depressurization and repressurization. While it is within the transfer chamber, the wafer is held on a paddle having openings therein adapted to be covered by the wafer. The paddle is fixedly arranged in the transfer chamber. A drawing means is provided to inhibit motion of the wafer in the transfer chamber during the alternating pressurization and depressurization by drawing the wafer to the wafer-receiving surface of the paddle.

In summary, some key features of the present invention include the following:

1. a transfer chamber for the wafers,

2. an inspection chamber which is at vacuum pressure,
3. the transfer chamber is subjected to alternating depressurization and represurization,
4. the wafer is placed upon a paddle which is fixedly arranged in the transfer chamber,  
and
5. the drawing means inhibits motion of the wafer during the alternating depressurization and represurization of the transfer chamber.

Adams discloses a substrate holder which provides both vacuum holding and gravity holding. It discloses substrate processing modules 14 and substrate holding modules 16 in communication with main section 12. A substrate transport mechanism 22 moves substrates S among the modules 14, 16. Transport mechanism 22 includes a movable arm section 52 provided with two substrate holders 54 which are each connected by conduit 58 to vacuum source 60. Controller 56 actuates valve 62 which, when open, applies a vacuum to holders 54 to hold the substrate thereon. When the substrate is properly held by vacuum onto substrate holders 54, controller 56 selects a fast setting for the acceleration and deceleration of movable arm section 52. However, when the vacuum-holding of the substrate fails, controller 56 automatically switches its mode of operation from the fast setting to a slow setting which relies only on gravity-holding of the substrate to retain the holder stationary during movement of arm section 52.

A comparison of the claimed invention with Adams reveals that both utilize a transfer chamber. However, other than this one similarity, none of the other above-listed features of the present invention is disclosed, taught or even hinted at by Adams. In particular,

- a. Adams does not disclose retaining an inspection chamber at vacuum pressure.

b. Also, the transfer chamber is not disclosed as being subjected to alternating depressurization and repressurization.

c. Furthermore, Adams does not disclose a paddle that is fixedly arranged in the transfer chamber and on which the wafer is held. Instead, the wafers in Adams are disclosed only as being held on movable arm 52.

d. Moreover, Adams does not disclose a drawing means for inhibiting motion of the wafer in the transfer chamber "during at least one of the alternating depressurization and repressurization" of the transfer chamber.

Accordingly, claim 1 clearly is not anticipated by Adams. Therefore, the rejection of claim 1 as being anticipated by Adams under 35 USC 102 must be withdrawn. Moreover, the many differences pointed out above between claim 1 and this reference are so substantial, and even fundamental, that there is no basis whatsoever to assert an obviousness rejection under 35 USC 103. Thus, claim 1 is clearly allowable over Adams under 35 USC 102 as well as under 35 USC 103.

Claims 2-9 and 12 are dependent upon claim 1, either directly or indirectly, and thus each is allowable therewith.

Claim 13 includes many of the features set forth above with regard to claim 1 as not being disclosed in Adams. Thus, because of such differences, claim 13 is also allowable over Adams. Moreover, dependent claims 14-16 include features which serve to even more clearly distinguish the present invention over Adams. For example, claim 14 recites that the valve means is not only connected between the vacuum source and the paddle openings, but also between the interior of the transfer chamber and such openings in the paddle. By actuating the valve means to communicate the interior of the transfer chamber with the openings in the paddle, the suction is broken which

enables the wafer to be lifted off the paddle (see page 12, lines 10-14 of the specification). Thus, claims 13-16 are allowable over Adams under 35 USC 102 and 35 USC 103.

Claim 17 is a method having features that correspond to elements recited in claim 1 which have been shown above to distinguish the invention over Adams. Accordingly, claim 17 is allowable for reasons presented above with respect to claim 1.

Claims 18 and 19 depend from claim 17 and, thus, each is allowable therewith.

Applicant gratefully acknowledges the allowance of claims 22-34.

Withdrawn claims 10 and 11 depend from allowable claim 1. Thus, a rejoinder of these claims is in order.

Claim 16 depends from allowable claim 13. Thus, a rejoinder of claim 16 is in order.

Claims 20 and 21 depend from allowable claim 17 and, thus, a rejoinder of these claims is in order.

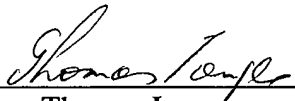
Applicant wishes to reply as follows to the Examiner's Statement of Reasons for Allowance concerning claims 22-34. While applicant believes that these claims are allowable, applicant does not acquiesce that patentability resides in each limitation exactly as expressed by the Examiner, nor that each limitation is required for patentably distinguishing the claims over the prior art. Moreover, it is noted that the list of limitations apparently applies to allowed claim 22, but perhaps less so to allowed claim 27. Thus, the Examiner is respectfully requested to withdraw the Statement and to rely on the record as a whole instead.

Based on all of the above, it is respectfully submitted that the present application is now in proper condition for allowance. Prompt and favorable action to this effect and early passing of this application to issue are respectfully solicited.

Should the Examiner have any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,

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